



Aptina, LLC
 2660 Zanker Road
 San Jose, CA 95134
 Tel: 408-660-2699
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Subject: REACH 151 Certificate of Compliance

Aptina is fully aware of the REACH (Registration, Evaluation, Authorisation and Restriction of Chemicals) regulation concerning the Substances of Very High Concern (SVHC) and is working directly with our suppliers to ensure all of our facilities meet all of the REACH requirements.

To the best of our knowledge and based on the information provided by suppliers, none of our suppliers use any of the banned substances listed below in concentrations greater than the maximum limits by weight to homogenous materials as defined by the REACH .

Aptina certifies that our die, wafer and Pb-free component level products comply with REACH as reference to the substances currently published on the European Chemical Agency Candidate List of SVHC as shown on the **Table A** below. See also the web link for reference: <http://www.echa.europa.eu/web/guest/candidate-list-table>

Aptina will inform customers for any changes in materials, processes or techniques that may affect the maximum concentration allowed for banned substances thru the PCN (Process Change Notification) procedure.

If you have any further questions regarding the product compliance of Aptina products, please contact your local sales representative.

Signature: Charles A. Steffek Date: 4/25/2014
 (Authorized Representative of Aptina, LLC.)

Name: Chuck Steffek Title: Sr. Manager, Quality Systems

Table A. REACH 151 SVCH List

SN	Date of inclusion	Banned Substance name	EC number	CAS number	SVHC Present? (Yes/No)
1	2013/12/16	Cadmium sulphide	215-147-8	1306-23-6	No
2	2013/12/16	Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo]-5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38)	217-710-3	1937-37-7	No
3	2013/12/16	Dihexyl phthalate	201-559-5	84-75-3	No
4	2013/12/16	Imidazolidine-2-thione; (2-imidazoline-2-thiol)	202-506-9	96-45-7	No
5	2013/12/16	Trixylyl phosphate	246-677-8	25155-23-1	No
6	2013/12/16	Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28)	209-358-4	573-58-0	No



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7	2013/12/16	Lead di(acetate)	206-104-4	301-04-2	No
8	2013/06/20	Cadmium	231-152-8	7440-43-9	No
9	2013/06/20	Ammonium pentadecafluorooctanoate (APFO)	223-320-4	3825-26-1	No
10	2013/06/20	Pentadecafluorooctanoic acid (PFOA)	206-397-9	335-67-1	No
11	2013/06/20	Dipentyl phthalate (DPP)	205-017-9	131-18-0	No
12	2013/06/20	4-Nonylphenol, branched and linear, ethoxylated [substances with alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol, ethoxylated covering UVCB]	----	----	No
13	2013/06/20	Cadmium oxide	215-146-2	1306-19-0	No
14	2012/12/19	Pyrochlore, antimony lead yellow	232-382-1	8012-00-8	No
15	2012/12/19	6-methoxy-m-toluidine (p-cresidine)	204-419-1	120-71-8	No
16	2012/12/19	Henicosafuoroundecanoic acid	218-165-4	2058-94-8	No
17	2012/12/19	Hexahydromethylphthalic anhydride [1], Hexahydro-4-methylphthalic anhydride [2], Hexahydro-1-methylphthalic anhydride [3], Hexahydro-3-methylphthalic anhydride [4]	247-094-1, 243-072-0, 256-356-4, 260-566-1	25550-51-0, 19438-60-9, 48122-14-1, 57110-29-9	No
18	2012/12/19	Cyclohexane-1,2-dicarboxylic anhydride [1], cis-cyclohexane-1,2-dicarboxylic anhydride [2], trans-cyclohexane-1,2-dicarboxylic anhydride [3]	201-604-9, 236-086-3, 238-009-9	85-42-7, 13149-00-3, 14166-21-3	No
19	2012/12/19	Dibutyltin dichloride (DBTC)	211-670-0	683-18-1	No
20	2012/12/19	Lead bis(tetrafluoroborate)	237-486-0	13814-96-5	No
21	2012/12/19	Lead dinitrate	233-245-9	10099-74-8	No
22	2012/12/19	Silicic acid, lead salt	234-363-3	11120-22-2	No
23	2012/12/19	4-Aminoazobenzene	200-453-6	60-09-3	No
24	2012/12/19	Lead titanium zirconium oxide	235-727-4	12626-81-2	No
25	2012/12/19	Lead monoxide (lead oxide)	215-267-0	1317-36-8	No
26	2012/12/19	o-Toluidine	202-429-0	95-53-4	No
27	2012/12/19	3-ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine	421-150-7	143860-04-2	No
28	2012/12/19	Silicic acid (H ₂ Si ₂ O ₅), barium salt (1:1), lead-doped [with lead (Pb) content above the applicable generic concentration limit for 'toxicity for reproduction' Repr. 1A (CLP) or category 1 (DSD)]	272-271-5	68784-75-8	No
29	2012/12/19	Trilead bis(carbonate)dihydroxide	215-290-6	1319-46-6	No
30	2012/12/19	Furan	203-727-3	110-00-9	No
31	2012/12/19	N,N-dimethylformamide	200-679-5	68-12-2	No
32	2012/12/19	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated [covering well-defined substances and UVCB substances, polymers and homologues]	-	-	No
33	2012/12/19	4-Nonylphenol, branched and linear [substances with a linear and/or branched alkyl chain with a carbon number of 9 covalently bound in position 4 to phenol]	-	-	No



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34	2012/12/19	4,4'-methylenedi-o-toluidine	212-658-8	838-88-0	No
35	2012/12/19	Diethyl sulphate	200-589-6	64-67-5	No
36	2012/12/19	Dimethyl sulphate	201-058-1	77-78-1	No
37	2012/12/19	Lead oxide sulfate	234-853-7	12036-76-9	No
38	2012/12/19	Lead titanium trioxide	235-038-9	12060-00-3	No
39	2012/12/19	Acetic acid, lead salt, basic	257-175-3	51404-69-4	No
40	2012/12/19	[Phthalato(2-)]dioxotrilead	273-688-5	69011-06-9	No
41	2012/12/19	Bis(pentabromophenyl) ether (decabromodiphenyl ether; DecaBDE)	214-604-9	1163-19-5	No
42	2012/12/19	N-methylacetamide	201-182-6	79-16-3	No
43	2012/12/19	Dinoseb (6-sec-butyl-2,4-dinitrophenol)	201-861-7	88-85-7	No
44	2012/12/19	1,2-Diethoxyethane	211-076-1	629-14-1	No
45	2012/12/19	Tetralead trioxide sulphate	235-380-9	12202-17-4	No
46	2012/12/19	N-pentyl-isopentylphthalate	-	776297-69-9	No
47	2012/12/19	Dioxobis(stearato)trilead	235-702-8	12578-12-0	No
48	2012/12/19	Tetraethyllead	201-075-4	78-00-2	No
49	2012/12/19	Pentalead tetraoxide sulphate	235-067-7	12065-90-6	No
50	2012/12/19	Pentacosafuorotridecanoic acid	276-745-2	72629-94-8	No
51	2012/12/19	Tricosafuorododecanoic acid	206-203-2	307-55-1	No
52	2012/12/19	Heptacosafuorotetradecanoic acid	206-803-4	376-06-7	No
53	2012/12/19	1-bromopropane (n-propyl bromide)	203-445-0	106-94-5	No
54	2012/12/19	Methoxyacetic acid	210-894-6	625-45-6	No
55	2012/12/19	4-methyl-m-phenylenediamine (toluene-2,4-diamine)	202-453-1	95-80-7	No
56	2012/12/19	Methyloxirane (Propylene oxide)	200-879-2	75-56-9	No
57	2012/12/19	Trilead dioxide phosphonate	235-252-2	12141-20-7	No
58	2012/12/19	o-aminoazotoluene	202-591-2	97-56-3	No
59	2012/12/19	1,2-Benzenedicarboxylic acid, dipentylester, branched and linear	284-032-2	84777-06-0	No
60	2012/12/19	4,4'-oxydianiline and its salts	202-977-0	101-80-4	No
61	2012/12/19	Orange lead (lead tetroxide)	215-235-6	1314-41-6	No
62	2012/12/19	Biphenyl-4-ylamine	202-177-1	92-67-1	No
63	2012/12/19	Diisopentylphthalate	210-088-4	605-50-5	No
64	2012/12/19	Fatty acids, C16-18, lead salts	292-966-7	91031-62-8	No
65	2012/12/19	Diazene-1,2-dicarboxamide (C,C'-azodi(formamide))	204-650-8	123-77-3	No
66	2012/12/19	Sulfurous acid, lead salt, dibasic	263-467-1	62229-08-7	No
67	2012/12/19	Lead cyanamidate	244-073-9	20837-86-9	No
68	2012/06/18	4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3)	208-953-6	548-62-9	No



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69	2012/06/18	1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione (β-TGIC)	423-400-0	59653-74-6	No
70	2012/06/18	1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme)	203-977-3	112-49-2	No
71	2012/06/18	4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol	209-218-2	561-41-1	No
72	2012/06/18	Lead(II) bis(methanesulfonate)	401-750-5	17570-76-2	No
73	2012/06/18	1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME)	203-794-9	110-71-4	No
74	2012/06/18	Diboron trioxide *	215-125-8	1303-86-2	No
75	2012/06/18	α,α-Bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4)	229-851-8	6786-83-0	No
76	2012/06/18	1,3,5-Tris(oxiran-2-ylmethyl)-1,3,5-triazine-2,4,6-trione (TGIC)	219-514-3	2451-62-9	No
77	2012/06/18	4,4'-bis(dimethylamino)benzophenone (Michler's ketone)	202-027-5	90-94-8	No
78	2012/06/18	N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base)	202-959-2	101-61-1	No
79	2012/06/18	[4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)	219-943-6	2580-56-5	No
80	2012/06/18	Formamide	200-842-0	75-12-7	No
81	2011/12/19	Zirconia Aluminosilicate Refractory Ceramic Fibres	(650-017-00-8)		No
82	2011/12/19	Calcium arsenate	231-904-5	7778-44-1	No
83	2011/12/19	Bis(2-methoxyethyl) ether	203-924-4	111-96-6	No
84	2011/12/19	Aluminosilicate Refractory Ceramic Fibres	(650-017-00-8)		No
85	2011/12/19	Potassium hydroxyoctaoxodizincatedichromate	234-329-8	11103-86-9	No
86	2011/12/19	Lead dipicrate	229-335-2	6477-64-1	No
87	2011/12/19	N,N-dimethylacetamide	204-826-4	127-19-5	No
88	2011/12/19	Arsenic acid	231-901-9	7778-39-4	No
89	2011/12/19	2-Methoxyaniline; o-Anisidine	201-963-1	90-04-0	No
90	2011/12/19	Trilead diarsenate	222-979-5	3687-31-8	No
91	2011/12/19	1,2-dichloroethane	203-458-1	107-06-2	No
92	2011/12/19	Pentazinc chromate octahydroxide	256-418-0	49663-84-5	No
93	2011/12/19	4-(1,1,3,3-tetramethylbutyl)phenol	205-426-2	140-66-9	No
94	2011/12/19	Formaldehyde, oligomeric reaction products with aniline	500-036-1	25214-70-4	No
95	2011/12/19	Bis(2-methoxyethyl) phthalate	204-212-6	117-82-8	No
96	2011/12/19	Lead diazide, Lead azide	236-542-1	13424-46-9	No
97	2011/12/19	Lead styphnate	239-290-0	15245-44-0	No
98	2011/12/19	2,2'-dichloro-4,4'-methylenedianiline	202-918-9	101-14-4	No
99	2011/12/19	Phenolphthalein	201-004-7	77-09-8	No
100	2011/12/19	Dichromium tris(chromate)	246-356-2	24613-89-6	No
101	20/06/2011	Cobalt dichloride	231-589-4	7646-79-9	No



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102	20/06/2011	1,2,3-Trichloropropane	202-486-1	96-18-4	No
103	20/06/2011	1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters	271-084-6	68515-42-4	No
104	20/06/2011	1-Methyl-2-pyrrolidone	212-828-1	872-50-4	No
105	20/06/2011	Hydrazine	206-114-9	302-01-2; 7803-57-8	No
106	20/06/2011	Strontium chromate	232-142-6		No
107	20/06/2011	2-Ethoxyethyl acetate	203-839-2	111-15-9	No
108	20/06/2011	1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich	276-158-1	71888-89-6	No
109	2010/12/15	Chromic acid, Dichromic acid, Dichromic acid, Oligomers of chromic acid and dichromic acid	231-801-5; 236-881-5	7738-94-5; 13530-68-2	No
110	2010/12/15	Cobalt(II) carbonate	208-169-4	513-79-1	No
111	2010/12/15	Cobalt(II) diacetate	200-755-8	71-48-7	No
112	2010/12/15	2-Methoxyethanol	203-713-7	109-86-4	No
113	2010/12/15	Chromium trioxide	215-607-8	1333-82-0	No
114	2010/12/15	Cobalt(II) dinitrate	233-402-1	10141-05-6	No
115	2010/12/15	Cobalt(II) sulphate	233-334-2	10124-43-3	No
116	2010/12/15	2-Ethoxyethanol	203-804-1	110-80-5	No
117	2010/06/18	Disodium tetraborate, anhydrous	215-540-4	1303-96-4; 1330-43-4; 12179-04-3	No
118	2010/06/18	Tetraboron disodium heptaoxide, hydrate	235-541-3	12267-73-1	No
119	2010/06/18	Potassium dichromate	231-906-6	7778-50-9	No
120	2010/06/18	Ammonium dichromate	232-143-1	9/5/7789	No
121	2010/06/18	Trichloroethylene	201-167-4	79-01-6	No
122	2010/06/18	Sodium chromate	231-889-5	11/3/7775	No
123	2010/06/18	Potassium chromate	232-140-5	7789-00-6	No
124	2010/06/18	Boric acid	233-139-2; 234-343-4	10043-35-3; 11113-50-1	No
125	2010/03/30	Acrylamide	201-173-7	79-06-1	No
126	2010/01/13	Lead chromate molybdate sulphate red (C.I. Pigment Red 104)	235-759-9	12656-85-8	No
127	2010/01/13	Lead chromate	231-846-0	7758-97-6	No
128	2010/01/13	Anthracene oil, anthracene-low	292-604-8	90640-82-7	No
129	2010/01/13	2,4-Dinitrotoluene (2,4-DNT)	204-450-0	121-14-2	No
130	2010/01/13	Tris(2-chloroethyl)phosphate	204-118-5	115-96-8	No
131	2010/01/13	Anthracene oil, anthracene paste, anthracene fraction	295-275-9	91995-15-2	No
132	2010/01/13	Anthracene oil	292-602-7	90640-80-5	No
133	2010/01/13	Pitch, coal tar, high temp.	266-028-2	65996-93-2	No



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134	2010/01/13	Lead sulfochromate yellow (C.I. Pigment Yellow 34)	215-693-7	1344-37-2	No
135	2010/01/13	Anthracene oil, anthracene paste, distn. Lights	295-278-5	91995-17-4	No
136	2010/01/13	Diisobutyl phthalate (DIBP)	201-553-2	84-69-5	No
137	2010/01/13	Anthracene oil, anthracene paste	292-603-2	90640-81-6	No
138	2008/10/28	Sodium dichromate	234-190-3	7789-12-0; 10588-01-9	No
139	2008/10/28	5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene)	201-329-4	81-15-2	No
140	2008/10/28	4,4'- Diaminodiphenylmethane (MDA)	202-974-4	101-77-9	No
141	2008/10/28	Bis(tributyltin)oxide (TBTO)	200-268-0	56-35-9	No
142	2008/10/28	Triethyl arsenate	427-700-2	15606-95-8	No
143	2008/10/28	Dibutyl phthalate (DBP)	201-557-4	84-74-2	No
144	2008/10/28	Diarsenic trioxide	215-481-4	1327-53-3	No
145	2008/10/28	Anthracene	204-371-1	120-12-7	No
146	2008/10/28	Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins)	287-476-5	85535-84-8	No
147	2008/10/28	Lead hydrogen arsenate	232-064-2	7784-40-9	No
148	2008/10/28	Benzyl butyl phthalate (BBP)	201-622-7	85-68-7	No
149	2008/10/28	Hexabromocyclododecane (HBCDD)	247-148-4; 221-695-9	25637-99-4; 3194-55-6; 134237-50-6; 134237-51-7; 134237-52-8	No
150	2008/10/28	Diarsenic pentaoxide	215-116-9	1303-28-2	No
151	2008/10/28	Bis (2-ethylhexyl)phthalate (DEHP)	204-211-0	117-81-7	No

----- End of Certificate -----